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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,555	06/29/2001	Hong Jin Kim	8733.443.00	5076
30827	7590	03/11/2004	EXAMINER	
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			NGO, HUYEN LE	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,555

Applicant(s)

KIM, HONG JIN

Examiner

Julie-Huyen L. Ngo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 5-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 26, 2003 has been entered.

### **Specification**

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The abstract of the disclosure is objected to because it not clearly states which is new in the art to which the invention pertains as claimed. Correction is required. See MPEP § 608.01(b).

The specification of the disclosure is objected because it appears that reference "85" in line 2 of paragraph 53 shall be \_\_95 \_\_. Also different terms, i.e. "*electrode link, pad link, and electrode link pattern*", have been used to describe the same element "93" in paragraphs 52-55; term used to describe the same element shall be the same.

The specification of the disclosure is objected because different terms, i.e., "*transparent electrode pattern and transparent electrode*," have been used to describe the same elements "28, 30" in paragraphs 30-34; term used to describe the same element

shall be the same. Also reference "16" has been designated for pattern (line 1 of page 8); however, shall reference "16" be designated for electrode pad as the electrode pad 92 in figures 9A&B and in according with the term "electrode pad" used in claims 1-4?

### ***Claim Objections***

Claim 1 is objected to for being unclear of what considers to be the size, e.g. thickness, length, width etc... of the pad members that is different, and how the size is different in accordance with the length of the electrode link.

Claim 2 is object to as being unclear of what of the electrode pad and the transparent electrode is being varied along with the length of the electrode links. It appears from the description of figures 4A&B that the length of the transparent electrode 28/30 is varies along with the length of the electrode link.

Claims 3-4 are objected as bearing the defect of the claims from which they depended.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In lines 4-5 of claim 1, the recitation calling for "*each pad members having a different size in accordance with a length of the electrode link*" was not described in the specification. According to the description in the specification (paragraphs 30-34) and figures 4A&B, the transparent electrode 28/30 of the pad 40 is varied in length along with the length of the electrode link 23/25.

In the last two lines of claim 2, the recitation calling for "*any one of the electrode pad and the transparent electrode varies along with the length of the electrode links*" " was not described in the specification. According to the description in the specification (paragraphs 30-34) and figures 4A&B, only the transparent electrode 28/30 is varied in length along/according with the length of the electrode link 23/25.

The recitation recited in claim 3 is not described in the specification. According to the description in the specification (paragraphs 30-34) and figures 4A&B, the transparent electrode 28/30 is varied in length along/according with the length of the electrode link 23/25.

The recitation recited in claim 4 is not described in the specification. According to the description in the specification (paragraphs 30-34) and figures 4A&B, the transparent electrode 28/30 is extended toward the pixel area to have a different length in accordance with the length of the electrode link.

For examination purpose, claims 1-4 are interpreted according to the description in the specification and of what being shown in figures 4A&B for the elected species A.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kishimoto et al. (US4586789).

Kishimoto et al. teach (Figs. 4 and 7) forming a liquid crystal display including a pixel area and a driving circuit comprising:

- at least two electrode links 15, each extended from the pixel area;
- at least two pad members (13&14 of fig. 4 or 22&23 of fig. 7) in contact with a driving circuit on the driver circuit substrate (cols. 2-4) and the electrode links,
- each pad members having a different size (length) in accordance with a length of the electrode link. As shown in Fig. 4, pad members 13 and 14 have different sizes in accordance with the lengths of the electrode links 15. As shown in Fig. 7, pad members 22 and 23 have different sizes in accordance with the lengths of the electrode links.

***Allowable Subject Matter***

Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the objection set forth in this Office action and in independent form including all of the limitations of the base claim.

The following is a statement of reasons for the indication of allowable subject matter.

Claim 2 would be allowable because there is no prior art of record that either suggests or teaches a liquid crystal display comprising the specific limitation recited in claim 2:

the length of the transparent electrode is varies along with the length of the electrode link.

***Response to Arguments***

Applicant's arguments filed November 26, 2003 have been fully considered but they are not persuasive.

Applicant's ONLY arguments are following:

1) The recitation calling for "*the width of the electrode pad increases with its length*" amended in claims 5 and 6 are shown in Figs. 9A-9B and supported in paragraphs 52 and 53 of the specification. Therefore, claims 5 and 6 as they were amended are directed to the elected Species A.

2) Claims 13-15 are also directed to Species A as illustrated in Fig. 9A-9B since

claim 13 has been amended to require that "*the electrode links differ from each other in a thickness,*" which is illustrated in Fig. 9A and 9B, and described in the specification at paragraph 55.

3) Kishimoto considered separately or in combination with ARA does not teach, disclose, or suggest all the features of Applicant's invention as required by claim 1. It does not discuss at all the size of the pad members themselves or the length of the electrode links. Furthermore, Kishimoto does not disclose or suggest "*each of the pad members having a different size in accordance with the length of the electrode link.*"

Examiner's responses to Applicants' ONLY arguments are following:

1) Applicant is to note that the recitation amended in claims 5 and 6 calling for "*the width of the electrode pad increases with its length,*" which is neither shown in Figs. 9A-9B nor supported in paragraphs 52 and 53 of the specification. However, these paragraphs describe the difference in widths of electrode links 93 and 95 NOT electrode pad 92.

2) Applicant also is to note that the recitation amended in claim 13 calling for "*the electrode links differ from each other in a thickness,*" which is neither illustrated in Fig. 9A and 9B, nor described in the specification at paragraph 55.

Furthermore, claim 14 have been amended with "*the width of the electrode pad increases with its length*"; and claim 15 with "*the width of the electrode pad decreases with its length*". These limitations are neither shown in Fig. 9A and 9B, nor described in the specification at paragraph 55 as alleged by Applicant.



However, figures 9A and 9B and paragraph 55 disclose the difference in widths of the electrode links 93 and 95 not electrode pad 92.

Therefore, claims 5, 6 and 13-15 as they were amended are not directed to the elected Species A, and are not readable on figures 4A&B or figures 9A&B.

Accordingly, claims 5, 6 and 13-15 are remain withdrawn from consideration as being directed to a non-elected species of the invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3) Kishimoto considered separately disclose all the features of Applicant's invention as required by claim 1 as set forth above in the rejection and particularly in figures 4 and 7, Kishimoto et al. disclose that "*each pad members having a different size in accordance with a length of the electrode link*" with pad members 13 and 14 have different sizes in accordance with the lengths of the electrode links 15; and pad members 22 and 23 have different sizes in accordance with the lengths of the electrode links.

### ***Conclusion***

US 6052169 A discloses a liquid crystal display device having an equipotential electrode structure having resistance of each leading part of an electrode changed by changing the width or the length of the leading part.

US 6630686 B1 discloses a liquid crystal display having pad parts and method for manufacturing same.

US 6700636 B2 disclose a liquid crystal display panel and method for manufacturing the same wherein each data line in the first set of data

lines has a first length extended into a pad region of the substrate, wherein each data line in the second set of data lines has a second length extended into the pad region of the substrate.

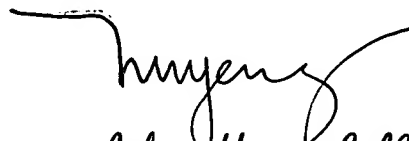
**Contact Information**

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

March 3, 2004

  
*Julie-Huyen L. Ngo*  
**Patent Examiner**  
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